

ABSTRACT

A method and apparatus for compensating, in the electrical domain, for chromatic
5 dispersion of an optical signal is disclosed. A received optical signal is converted to an
electrical signal. The spectrum of the electrical signal is amplified by a factor derived
from its frequency; and the phase of regions of said spectrum is selectively inverted to
thereby allow recovery of the transmitted data.

The optical signal may have a non-infinite extinction ratio to improve recovery of
10 the transmitted signal. The square root of the electrical signal may be taken to improve
recovery of the transmitted signal